Title (en)

A pulse width modulation amplifier.

Title (de)

Pulsbreitenmodulationsverstärker.

Title (fr)

Amplificateur à modulation de largeur d'impulsion.

Publication

EP 0644649 A2 19950322 (EN)

Application

EP 94114813 A 19940920

Priority

JP 23452193 A 19930921

Abstract (en)

In a pulse width modulation amplifier used for acoustic reproduction apparatuses, an input side operational amplifier of a pulse width modulation amplifier is used as an alternating current amplifier by grounding its minus (-) terminal through a serial circuit formed of a resister and a capacitor. By this circuit constitution, the direct current gain of the operational amplifier becomes 1, and the offset voltage decreases until inherent offset voltage of the operational amplifier itself. Since the operational amplifier has no direct current coupling with next amplifying stage, it does not make worse the offset voltage after the operational amplifier, so the offset voltage of the final output stage becomes smaller. Also, the negative feedback circuits connecting from the final output stage to the input of the operational amplifier include a low-pass filter whose capacitor is grounded and negative feedback signal is transmitted through a capacitor to the input of the operational amplifier so that direct current is cut. By this circuit constitution, the influence of the carrier and its higher harmonics and other noises leaked to the operational amplifier through the feedback circuit can be decreased. <IMAGE>

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H03F 3/217

IPC 8 full level

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CPC (source: EP US)

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Cited by

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Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0644649 A2 19950322; **EP 0644649 A3 19960214**; **EP 0644649 B1 20041201**; DE 69434163 D1 20050105; DE 69434163 T2 20050414; JP 3106795 B2 20001106; JP H0794963 A 19950407; US 5508663 A 19960416

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